

WHAT IS CLAIMED IS:

1. A method of authenticating an attached function for the purpose of permitting access by the attached function to network services associated with a network infrastructure including a network entry device and an IEEE 802.1X Port Access Entity (PAE), the method comprising the steps of:
  - a. receiving at the network entry device from the attached function one or more signal packets including authentication information; and
  - b. transferring the one or more signal packets including authentication information through a relay function to the IEEE 802.1X PAE.
2. The method as claimed in Claim 1 further comprising the step of making the transfer of the one or more signal packets through the relay function compatible with IEEE Standard 802.1D or IEEE Standard 802.1Q.
3. The method as claimed in Claim 2 further comprising the step of examining the signal packets for a reserved Media Access Control address and/or an Ethernet type.
4. The method as claimed in Claim 1 wherein the authentication information includes an Extensible Authentication Protocol message.
5. The method as claimed in Claim 1 wherein the network infrastructure includes a plurality of network entry devices further comprising the step of maintaining state for one or more sessions associated with one or more network entry devices.
6. The method as claimed in Claim 5 wherein the step of maintaining state is performed by a tracking function of one or more network infrastructure devices.
7. The method as claimed in Claim 1 further comprising the steps of recognizing through a tracking function of the network infrastructure authentication success messages and enabling a change of state associated with a forwarding function of the network entry device.

8. The method as claimed in Claim 7 wherein the tracking function forms part of the network entry device.

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9. A system to authenticate an attached function for the purpose of permitting access by the attached function to network services associated with a network infrastructure, the network infrastructure including a network entry device having an uncontrolled input port, and a central forwarding device including an IEEE 802.1X Port Access Entity (PAE), the system comprising a relay function of the network entry device, the relay function configured to receive authentication signals from the uncontrolled input port of the network entry device and forward the authentication signals to the PAE for authentication of the attached function before permitting access of the attached function to the network services through the network entry device.

10. The system as claimed in Claim 9 wherein the relay function forwards the authentication signals in a manner compatible with IEEE Standard 802.1D or IEEE Standard 802.1Q.

11. The system as claimed in Claim 9 wherein the relay function is configured to recognize authentication signals for a reserved Media Access Control address and/or an Ethernet type.

12. The system as claimed in Claim 9 wherein the network entry device further includes a forwarding function connected to a controlled input port of the network entry device, wherein the forwarding function is connected to the central forwarding device.

13. The system as claimed in Claim 9 wherein the relay function is configured to recognize authentication information of the authentication signals received at the uncontrolled input port and to transfer the authentication signals to the PAE via an uncontrolled output port of the network entry device upon recognition of the authentication information.

14. The system as claimed in Claim 9 further comprising a tracking function of the network infrastructure to authenticate success messages and to enable a change of state associated with a forwarding function of the network entry device.